

REMARKS/ARGUMENTS

Brief Summary of Status

Claims 1-63 are pending in the application.

Claims 1-5, 7, 13-17, 20, 26-29, 31-39, 41, 47-53, 55, and 61-63 are rejected.

Claims 6, 8-12, 18, 19, 21-25, 30, 40, 42-46, 54, and 56-60 are objected to.

Claim Rejections - 35 U.S.C. § 102

The Examiner asserts:

“3. Claims 1, 2, 4, 5, 14, 16, 27, 35, 36, 38, 39, 48, 50, 52, 53, and 62 are rejected under 35 U.S.C. 102(e) as being anticipated by Hoffmann (7,212,499 B2).” (final office action, Part of Paper No./Mail Date 20071213, p. 2)

Claim Rejections - 35 U.S.C. § 103

The Examiner asserts:

“5. Claims 7, 20, 29, 33, 41, 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoffmann (7,212,499 B2) in view of Shurmer (5,974,237).” (final office action, Part of Paper No./Mail Date 20071213, p. 10)

The Examiner asserts:

“6. Claims 3, 17, 31, 37, and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoffmann (7,212,499 B2) in view of Jorgensen (6,640,248 B1).” (final office action, Part of Paper No./Mail Date 20071213, p. 11)

The Examiner asserts:

“7. Claims 13, 26, 32, 47, and 61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoffmann (7,212,499 B2) in view of Olson (6,928,295 B2).” (final office action, Part of Paper No./Mail Date 20071213, p. 12)

The Examiner asserts:

“8. Claims 15, 28, 49, and 63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoffmann (7,212,499 82) in view of Ho (US 2004/0170217 A1).” (final office action, Part of Paper No./Mail Date 20071213, p. 13)

The Examiner asserts:

“9. Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hoffmann (7,212,499 B2) in view of Shurmer (5,974,237), further in view of Ho (US 2004101 7021 7 A1).” (final office action, Part of Paper No./Mail Date 20071213, p. 14)

Allowable Subject Matter

The Examiner asserts:

“10. Claims 6, 8-12, 18-19, 21 -25, 30, 40, 42-46, 54, and 56-60 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.” (final office action, Part of Paper No./Mail Date 20071213, p. 14)

Claim Rejections - 35 U.S.C. § 102

The Examiner asserts:

“3. Claims 1, 2, 4, 5, 14, 16, 27, 35, 36, 38, 39, 48, 50, 52, 53, and 62 are rejected under 35 U.S.C. 102(e) as being anticipated by Hoffmann (7,212,499 B2).” (final office action, Part of Paper No./Mail Date 20071213, p. 2)

Claim Rejections - 35 U.S.C. § 103

The Examiner asserts:

“5. Claims 7, 20, 29, 33, 41, 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoffmann (7,212,499 B2) in view of Shurmer (5,974,237).” (final office action, Part of Paper No./Mail Date 20071213, p. 10)

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The Examiner asserts:

“8. Claims 15, 28, 49, and 63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoffmann (7,212,499 82) in view of Ho (US 2004/0170217 A1).” (final office action, Part of Paper No./Mail Date 20071213, p. 13)

The Examiner asserts:

“9. Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hoffmann (7,212,499 B2) in view of Shurmer (5,974,237), further in view of Ho (US 2004101 7021 7 A1).” (final office action, Part of Paper No./Mail Date 20071213, p. 14)

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The Examiner asserts:

“10. Claims 6, 8-12, 18-19, 21 -25, 30, 40, 42-46, 54, and 56-60 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in

independent form including all of the limitations of the base claim and any intervening claims.” (final office action, Part of Paper No./Mail Date 20071213, p. 14)

Claim Rejections - 35 U.S.C. § 102

The Examiner asserts:

“3. Claims 1, 2, 4, 5, 14, 16, 27, 35, 36, 38, 39, 48, 50, 52, 53, and 62 are rejected under 35 U.S.C. 102(e) as being anticipated by Hoffmann (7,212,499 B2).” (final office action, Part of Paper No./Mail Date 20071213, p. 2)

The Applicant respectfully traverses.

The Applicant has amended certain of the claims.

The Applicant respectfully points out that, in order to support a proper rejection under 35 U.S.C. §102, a singular reference must teach and disclose each and every limitation of the subject matter as claimed by the Applicant. If the singular reference fails to teach and disclose each and every limitation of the subject matter as claimed by the Applicant, the rejections under 35 U.S.C. § 102 should be withdrawn.

The Applicant respectfully believes that Hoffmann fails to teach and disclose each and every limitation of the subject matter as claimed by the Applicant.

With respect to the Applicant’s previous claim 2 (some limitations of which are now included in independent claim 1), the Examiner asserts:

“Regarding claim 2, wherein the MAC (see “MAC layer,” col. 6, line 4) processes the assessed information (see “cause to determine the metrics. . . ,” col. 6, lines 25-27) corresponding to the plurality of operational parameters (see “signal-related parameters such as signal quality . . . ,” col. 6, lines 10-12); and based on the processed assessed information, the MAC modifies at least one operational parameter of the plurality of operational parameters (see “the MAC may also provide. . . ” and “which, in turn, causes the antenna beam angle to change,” col. 6, lines 37-39 and 47-51 respectively).” (final office action, Part of Paper No./Mail Date 20071213, p. 3, emphasis added)

Some of these Examiner-cited portions of Hoffman are provided below, in which Hoffman teaches and discloses:

“The MAC layer 805 may also provide the metrics or table of metrics to the SME 800 based on previously calculated or measured metrics. For example, a periodic or event-driven event may cause the MAC layer 805 to determine the metrics and provide the metrics to the SME 800 on an “as needed,” “as requested,” or predefined basis. The station 120a may associate with the distribution system via the access point 110, and the

MAC layer 805 may provide the metrics to the SME 800 before or after the associating with the distribution system, optionally in a preselected manner.

The SME 800 may issue commands to the antenna controller 815, which sends control signals 820 to the directive antenna array 205a. The control signals 820 may change the state of connection to reactances 320, 325 associated with the antenna elements 205 in the directive antenna array 200a, which, in turn, causes the antenna beam angle to change. The SME 800 may coordinate this action with causing the MAC layer 805 to provide the metrics associated with the antenna beam angles. For example, the SME 800 may command the directive antenna array 200 to steer its antenna beam from angle to angle in a step-and-hold manner while concurrently commanding the MAC layer 805 to measure the signal strength in a corresponding wait-and-measure manner until a metric is associated with each access point 110 at each antenna beam angle.

Based on the metrics, the SME 800 may issue further commands to the antenna controller 815 to steer the antenna beam in a direction associated with an access point 110. For example, the antenna beam may be steered to point directly toward an access point 110a or in the direction of a stronger multi-path that is associated with the same access point 110a. In this way, the SME 800 can use the best path for associating the station 120a with the selected access point 110a.” (Hoffman, col. 6, line 37 to col. 7, line 3, emphasis added)

The Applicant respectfully believes that it is very clear that it is the SME 800 which issues commands “which, in turn, causes the antenna beam angle to change”.

It is true that the SME 800 receives “the metrics or table of metrics” from the MAC layer 805, but these “the metrics or table of metrics” do absolutely nothing without the processing of “the metrics or table of metrics” by the SME 800 and the subsequent issuance of commands made by the SME 800 “to the antenna controller 815, which sends control signals 820 to the directive antenna array 205a” apparently based on the “the metrics or table of metrics”.

The “MAC layer 805 may also provide the metrics or table of metrics to the SME 800”, but without the issuing of commands by the SME 800, those “metrics or table of metrics” will not effectuate anything that “causes the antenna beam angle to change”.

The “metrics or table of metrics” is data or information, and the “metrics or table of metrics” are not commands that cause a modification or change or the “antenna beam angle”.

Moreover, the FIG. 8 of Hoffman shows no connectivity between the MAC layer 805 and the “antenna controller 815”, and as such, there can be no commands issued from the MAC layer 805 to the “antenna controller 815” “which, in turn, causes the antenna beam angle to change”.

The Applicant respectfully believes that Hoffman teaches and discloses very clearly:

“The SME 800 may issue commands to the antenna controller 815, which sends control signals 820 to the directive antenna array 205a. The control signals 820 may change the state of connection to reactances 320, 325 associated with the antenna elements 205 in the directive antenna array 200a, which, in turn, causes the antenna beam angle to change. The SME 800 may coordinate this action with causing the MAC layer 805 to provide the metrics associated with the antenna beam angles.”

Note it is the “SME 800” that coordinates the action including “causing the MAC layer 805 to provide the metrics associated with the antenna beam angles”.

The MAC layer 805 can provide the metrics (which can also be coordinated by the SME 800 in the first place), but Hoffman clearly teaches and discloses that “[b]ased on the metrics, the SME 800 may issue further commands to the antenna controller 815 to steer the antenna beam in a direction associated with an access point 110”.

It is clear that the “control signals 820 may change the state of connection to reactances 320, 325 associated with the antenna elements 205 in the directive antenna array 200a, which, in turn, causes the antenna beam angle to change”.

The “the metrics or table of metrics” from the MAC layer 805 **DOES NOT** change the state of any such reactances “which, in turn, causes the antenna beam angle to change”.

It is the SME 800 that issues commands to the “antenna controller 815” “which, in turn, causes the antenna beam angle to change”; in other words, it is the affirmative action of the SME 800 (e.g., commands issued there from) that “causes the antenna beam angle to change”.

The MAC layer 805 merely provides the “the metrics or table of metrics” to the SME 800. It is the SME 800 that issues commands to the “the antenna controller 815” that “causes the antenna beam angle to change”.

The “the metrics or table of metrics” provided by the MAC layer 805 to the SME 800, in and of themselves, do nothing that “causes the antenna beam angle to change”.

It is the affirmative action of the SME 800, in apparently performing decision-making based on the “the metrics or table of metrics” provided by the MAC layer 805 that determines whether or not to “issue commands to the antenna controller 815”.

It is clearly the “control signals 820” provided by the SME 800 (i.e., not by the MAC layer 805) that “change the state of connection to reactances 320, 325 associated with the antenna elements 205 in the directive antenna array 200a, which, in turn, causes the antenna beam angle to change”.

The Applicant respectfully believes that it is clearly **NOT** the MAC layer 805 that “issue commands to the antenna controller 815” that “causes the antenna beam angle to change”.

Considering FIG. 8 of Hoffman, there is no connectivity between the MAC layer 805 and the “antenna controller 815”.

However, there is in fact connectivity in FIG. 8 of Hoffman between the SME 800 and the “antenna controller 815” to convey these commands to the “antenna controller 815” that “in turn, causes the antenna beam angle to change”.

The Applicant respectfully believes that these comments made above with respect to Hoffman are also applicable with respect to all of the independent claims of the Applicant’s, in that, Hoffman fails to teach and disclose each and every limitation in accordance with the subject matter as claimed by the Applicant.

For at least these reasons, the Applicant respectfully believes that Hoffman fails to teach and disclose each and every limitation of the subject matter as claimed by the Applicant in independent claim 1.

The Applicant respectfully believes that independent claim 1 is allowable over Hoffman.

These comments made above with respect to the Applicant’s independent claim 1 are also applicable with respect to the Applicant’s independent claims 16, 35, and 50.

The Applicant respectfully believes that Hoffman does not teach and disclose each and every limitation of the subject matter as claimed by the Applicant in independent claims 16, 35, and 50.

The Applicant respectfully believes that independent claims 16, 35, and 50 are allowable over Hoffman.

Moreover, the Applicant respectfully believes that the dependent claims within claims 1, 2, 4, 5, 14, 16, 27, 35, 36, 38, 39, 48, 50, 52, 53, and 62 under 35, being further limitations on the subject matter of allowable independent claims, are also allowable.

As such, the Applicant respectfully requests that the Examiner withdraw the rejections to claims 1, 2, 4, 5, 14, 16, 27, 35, 36, 38, 39, 48, 50, 52, 53, and 62 under 35 U.S.C. § 102(e) as being anticipated by Hoffmann.

Claim Rejections - 35 U.S.C. § 103

The Examiner asserts:

“5. Claims 7, 20, 29, 33, 41, 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoffmann (7,212,499 B2) in view of Shurmer (5,974,237).” (final office action, Part of Paper No./Mail Date 20071213, p. 10)

The Applicant respectfully traverses.

The Applicant has amended certain of the claims.

The comments made above with respect to Hoffman are also applicable here.

The Applicant also respectfully believes that the inclusion of Shurmer does not overcome the deficiencies of Hoffman.

The Applicant respectfully believes that the combination of Hoffman and Shurmer fails to teach and disclose each and every limitation of the subject matter as claimed by the Applicant in independent claim 29.

The Applicant respectfully believes that independent claim 1 is allowable over Hoffman in view of Shurmer.

Moreover, the Applicant respectfully believes that the dependent claims within claims 7, 20, 29, 33, 41, 55, being further limitations on the subject matter of allowable independent claims, are also allowable.

As such, the Applicant respectfully requests that the Examiner withdraw the rejections to claims 7, 20, 29, 33, 41, 55 under 35 U.S.C. § 103(a) as being unpatentable over Hoffmann in view of Shurmer.

The Examiner asserts:

“6. Claims 3, 17, 31, 37, and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoffmann (7,212,499 B2) in view of Jorgensen (6,640,248 B1).” (final office action, Part of Paper No./Mail Date 20071213, p. 11)

The Applicant respectfully traverses.

The Applicant has amended certain of the claims.

The comments made above with respect to Hoffman are also applicable here.

The Applicant also respectfully believes that the inclusion of Jorgensen does not overcome the deficiencies of Hoffman.

Moreover, the Applicant respectfully believes that the dependent claims within claims 3, 17, 31, 37, and 51, being further limitations on the subject matter of allowable independent claims, are also allowable.

As such, the Applicant respectfully requests that the Examiner withdraw the rejections to claims 3, 17, 31, 37, and 51 under 35 U.S.C. § 103(a) as being unpatentable over Hoffmann in view of Jorgensen.

The Examiner asserts:

“7. Claims 13, 26, 32, 47, and 61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoffmann (7,212,499 B2) in view of Olson (6,928,295 B2).” (final office action, Part of Paper No./Mail Date 20071213, p. 12)

The Applicant respectfully traverses.

The Applicant has amended certain of the claims.

The comments made above with respect to Hoffman are also applicable here.

The Applicant also respectfully believes that the inclusion of Olson does not overcome the deficiencies of Hoffman.

Moreover, the Applicant respectfully believes that the dependent claims within claims 13, 26, 32, 47, and 61, being further limitations on the subject matter of allowable independent claims, are also allowable.

As such, the Applicant respectfully requests that the Examiner withdraw the rejections to claims 13, 26, 32, 47, and 61 under 35 U.S.C. § 103(a) as being unpatentable over Hoffmann in view of Olson.

The Examiner asserts:

“8. Claims 15, 28, 49, and 63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoffmann (7,212,499 B2) in view of Ho (US 2004/0170217 A1).”
(final office action, Part of Paper No./Mail Date 20071213, p. 13)

The Applicant respectfully traverses.

The Applicant has amended certain of the claims.

The comments made above with respect to Hoffman are also applicable here.

The Applicant also respectfully believes that the inclusion of Ho does not overcome the deficiencies of Hoffman.

Moreover, the Applicant respectfully believes that the dependent claims within claims 15, 28, 49, and 63, being further limitations on the subject matter of allowable independent claims, are also allowable.

As such, the Applicant respectfully requests that the Examiner withdraw the rejections to claims 15, 28, 49, and 63 under 35 U.S.C. § 103(a) as being unpatentable over Hoffmann in view of Ho.

The Examiner asserts:

“9. Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hoffmann (7,212,499 B2) in view of Shurmer (5,974,237), further in view of Ho (US 2004101 7021 7 A1).”
(final office action, Part of Paper No./Mail Date 20071213, p. 14)

The Applicant respectfully traverses.

The Applicant has amended certain of the claims.

The comments made above with respect to Hoffman are also applicable here.

The Applicant also respectfully believes that the inclusion of Shurmer, further in view of Ho, does not overcome the deficiencies of Hoffman.

Moreover, the Applicant respectfully believes that the dependent claim 34, being a further limitation on the subject matter of an allowable independent claim, is also allowable.

As such, the Applicant respectfully requests that the Examiner withdraw the rejections to claim 34 under 35 U.S.C. § 103(a) as being unpatentable over Hoffmann in view of Shurmer, further in view of Ho.

Allowable Subject Matter

The Examiner asserts:

“10. Claims 6, 8-12, 18-19, 21 -25, 30, 40, 42-46, 54, and 56-60 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.” (final office action, Part of Paper No./Mail Date 20071213, p. 14)

The Applicant respectfully traverses the objections to claims 6, 8-12, 18-19, 21 -25, 30, 40, 42-46, 54, and 56-60.

In view of at least the comments submitted herewith, the Applicant respectfully believes that independent claims 1, 16, 29, 35, and 50 are allowable.

The Applicant respectfully believes that dependent claims 6, 8-12, 18-19, 21 -25, 30, 40, 42-46, 54, and 56-60, being further limitations of the subject matter as claimed in allowable independent claims, are also allowable.

As such, the Applicant respectfully requests that the Examiner withdraw the objections to claims 6, 8-12, 18-19, 21 -25, 30, 40, 42-46, 54, and 56-60.

The Applicant respectfully believes that claims 1-63 are in condition for allowance and respectfully requests that they be passed to allowance.

The Examiner is invited to contact the undersigned by telephone or facsimile if the Examiner believes that such a communication would advance the prosecution of the present U.S. utility patent application.

RESPECTFULLY SUBMITTED,

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